

Regional HIV/AIDS Epidemiologic Profile of Essex County, Massachusetts: 2015

Recent changes to the presentation of Massachusetts HIV/AIDS surveillance data

Effective January 1, 2011, the Massachusetts Department of Public Health (MDPH), Bureau of Infectious Disease, HIV/AIDS fact sheets, epidemiologic reports and other HIV data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts. As of January 1, 2015, this resulted in the removal of 4,401 HIV/AIDS cases, of which 1,021 have died and 3,380 were living. These persons living with HIV/AIDS may still continue to reside and receive care in the Commonwealth. The total number of persons living with HIV/AIDS, irrespective of location at diagnosis, is the basis for MDPH service planning. Please note that previous HIV/AIDS fact sheets, data reports and presentations included cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the MDPH HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to eliminate the presumed heterosexual risk category for men; those cases have been reassigned to the no identified risk (NIR) category. The presumed heterosexual risk category was used with the intention of identifying HIV risk for women when sex with men is the only reported risk factor, there is no evidence of current or past injection drug use (IDU), and behavioral risk and HIV status information about male sexual partners are unknown. The application of the presumed heterosexual risk category to men is overly inclusive in that woman to man HIV transmission is biologically less probable, and there are alternate risks that are possible for men, including sex with other men (MSM) or IDU. The CDC reports men diagnosed with HIV/AIDS who report sex with women as their only risk factor, without corresponding partner risk or HIV status information, in the NIR category. This revision to report presumed heterosexual male HIV/AIDS cases as NIR will bring Massachusetts HIV/AIDS case reporting for men in alignment with CDC standards. The MDPH will maintain presumed heterosexual and heterosexual risk categories for women.

Table 1. Total number of people reported with HIV infection or AIDS¹ by mortality status on December 31, 2014: Essex County, Massachusetts²

	N	%
People Living with HIV/AIDS	1,685	62%
People Reported with HIV or AIDS who are Deceased	1,041	38%
Total Number of People Reported with HIV Infection or AIDS	2,726	100%

¹ Does not include individuals diagnosed with HIV infection (non-AIDS) who died prior to January 1, 1999 or who were not in care on January 1, 1999

² Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/15

Table 2. Average annual rate of HIV infection diagnosis from 2011 to 2013 and HIV/AIDS prevalence rate on 12/31/14¹: Essex County, Massachusetts²

Average annual HIV diagnosis rate from 2011–2013	Average rate per 100,000	Average annual number of HIV diagnoses
Essex County, MA	9.5	70.3
Massachusetts Total	10.7	701.3
HIV/AIDS prevalence rate on 12/31/14	Rate per 100,000	Number of people living with HIV/AIDS
Essex County, MA	226.7	1,685
Massachusetts Total	301.5	19,737

¹ The denominators for rate calculations are from the MDPH Massachusetts Race Allocated Census 2010 Estimates (MRACE 2010), Massachusetts Department of Public Health, Bureau of Health Information, Statistics, Research, and Evaluation.

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/15

Table 3. People living with HIV/AIDS¹, deaths among people reported with HIV/AIDS, and newly diagnosed HIV infections by year²: 2004–2013, Essex County, Massachusetts³

Year	HIV/AIDS Prevalence	Deaths among those with HIV/AIDS	Diagnosis of HIV Infection
2004	1,241	23	79
2005	1,299	27	85
2006	1,338	26	65
2007	1,363	33	58
2008	1,416	14	67
2009	1,452	22	58
2010	1,490	27	65
2011	1,525	24	59
2012	1,588	17	80
2013	1,645	15	72

¹ Number of people living with HIV/AIDS on 12/31 of each year

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/15

Table 4. People diagnosed with HIV infection from 2011–2013¹ and people living with HIV/AIDS on December 31, 2014 by gender, place of birth, race/ethnicity, exposure mode, age at HIV infection diagnosis and current age: Essex County, Massachusetts²

HIV Infection Diagnoses			PLWH/A	
Gender:	N	%	N	%
Male	145	69%	1,119	66%
Female	66	31%	566	34%
Place of Birth:	N	%	N	%
US	121	57%	999	59%
Puerto Rico/US Dependency ³	18	9%	244	14%
Non-US	72	34%	442	26%
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	81	38%	747	44%
Black (non-Hispanic)	42	20%	287	17%
Hispanic/Latino	83	39%	605	36%
Exposure Mode:	N	%	N	%
Male-to-male sex (MSM)	78	37%	529	31%
Injection Drug Use (IDU)	20	9%	280	17%
MSM/IDU	-- ⁷	-- ⁷	48	3%
Heterosexual Sex	31	15%	294	17%
Other	-- ⁷	-- ⁷	43	3%
Total Undetermined	73	35%	491	29%
• Presumed Heterosexual Sex ⁴	27	13%	176	10%
• Undetermined ⁵	46	22%	315	19%
Age:	N	%	N	%
	At Diagnosis		On December 31, 2014	
Under 13	1	<1%	4	<1%
13 to 19	6	3%	7	<1%
20 to 24	22	10%	30	2%
25 to 29	26	12%	65	4%
30 to 34	26	12%	79	5%
35 to 39	26	12%	116	7%
40 to 44	23	11%	140	8%
45 to 49	34	16%	299	18%
50 to 54	24	11%	365	22%
55 to 59	11	5%	277	16%
60+	12	6%	303	18%
Total⁶	211	100%	1,685	100%

¹ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

² Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Ninety-nine percent of people diagnosed with HIV infection from 2011–2013 who were born in a US dependency were born in Puerto Rico, <1% were born in the US Virgin Islands.

⁴ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁵ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁶ Total includes Asian/Pacific Islander, American Indian/Alaska Native, other and unspecified race/ethnicity.

⁷ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/15

Table 5. People living with HIV/AIDS on December 31, 2014 by gender and race/ethnicity: Essex County, Massachusetts¹

Race/Ethnicity:	Male		Female	
	N	%	N	%
White (non-Hispanic)	606	54%	141	25%
Black (non-Hispanic)	139	12%	148	26%
Hispanic/Latino	347	31%	258	46%
Asian/Pacific Islander	19	2%	14	2%
Total²	1,119	100%	566	100%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Total includes American Indian/Alaska Native, other and unspecified race/ethnicity.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/15

Table 6. People living with HIV/AIDS on December 31, 2014 by gender and exposure mode: Essex County, Massachusetts¹

Exposure Mode:	Male		Female	
	N	%	N	%
Male-to-male sex (MSM)	529	47%	N/A	N/A
Injection drug use (IDU)	176	16%	104	18%
MSM/IDU	48	4%	N/A	N/A
Heterosexual sex	81	7%	213	38%
Other	25	2%	18	3%
Total Undetermined	260	23%	231	41%
• Presumed heterosexual sex ²	N/A	N/A	176	31%
• Undetermined ³	260	23%	55	10%
Total	1,119	100%	566	100%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Includes female sex with male of unknown HIV status or risk. This category is limited to females.

³ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

N/A=Not Applicable

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/15

Table 7. People diagnosed with HIV infection by gender and year of diagnosis: Essex County, Massachusetts¹, 2004–2013²

	Male		Female		Total
	N	%	N	%	
2004	47	59%	32	41%	79
2005	50	59%	35	41%	85
2006	42	65%	23	35%	65
2007	35	60%	23	40%	58
2008	45	67%	22	33%	67
2009	38	66%	20	34%	58
2010	44	68%	21	32%	65
2011	42	71%	17	29%	59
2012	55	69%	25	31%	80
2013	48	67%	24	33%	72

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/15

Table 8. People diagnosed with HIV infection by race/ethnicity and year of diagnosis: Essex County, Massachusetts¹, 2004–2013²

	White Non-Hispanic		Black Non-Hispanic		Hispanic/Latino		Total ³
	N	%	N	%	N	%	N
2004	27	34%	17	22%	32	41%	79
2005	32	38%	20	24%	31	36%	85
2006	25	38%	15	23%	25	38%	65
2007	23	40%	7	12%	27	47%	58
2008	24	36%	15	22%	25	37%	67
2009	18	31%	12	21%	26	45%	58
2010	24	37%	14	22%	21	32%	65
2011	16	27%	9	15%	33	56%	59
2012	33	41%	20	25%	24	30%	80
2013	32	44%	13	18%	26	36%	72

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Totals include Asian/Pacific Islander, American Indian/Alaskan Native individuals, and those of other or undetermined race/ethnicity.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/15

Table 9. People diagnosed with HIV infection by place of birth and year of diagnosis: Essex County, Massachusetts¹, 2004–2013²

	US		Puerto Rico/ US Dependency ³		Non-US		Total
	N	%	N	%	N	%	N
2004	46	58%	8	10%	25	32%	79
2005	44	52%	8	9%	33	39%	85
2006	37	57%	7	11%	21	32%	65
2007	29	50%	10	17%	19	33%	58
2008	36	54%	7	10%	24	36%	67
2009	30	52%	6	10%	22	38%	58
2010	30	46%	8	12%	27	42%	65
2011	30	51%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	59
2012	45	56%	8	10%	27	34%	80
2013	46	64%	6	8%	20	28%	72

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Ninety-eight percent of people living with HIV/AIDS in MA who were born in a US dependency were born in Puerto Rico, 2% were born in US minor outlying areas, <1% were born in the US Virgin Islands, and <1% were born in Guam.

⁴ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/15

Table 10. People diagnosed with HIV infection by exposure mode and year of diagnosis: Essex County, Massachusetts¹, 2004–2013²

	MSM		IDU		MSM/ IDU		HTSX		Other		Pres. HTSX ³		Undeter- mined ⁴		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2004	19	24%	12	15%	-- ⁵	-- ⁵	10	13%	-- ⁵	-- ⁵	14	18%	21	27%	79
2005	23	27%	5	6%	-- ⁵	-- ⁵	14	16%	-- ⁵	-- ⁵	15	18%	25	29%	85
2006	19	29%	8	12%	-- ⁵	-- ⁵	14	22%	-- ⁵	-- ⁵	9	14%	14	22%	65
2007	16	28%	11	19%	-- ⁵	-- ⁵	9	16%	-- ⁵	-- ⁵	7	12%	14	24%	58
2008	21	31%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	13	19%	0	0%	9	13%	17	25%	67
2009	22	38%	-- ⁵	-- ⁵	0	0%	9	16%	-- ⁵	-- ⁵	9	16%	14	24%	58
2010	20	31%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	15	23%	0	0%	7	11%	17	26%	65
2011	20	34%	6	10%	-- ⁵	-- ⁵	7	12%	-- ⁵	-- ⁵	7	12%	17	29%	59
2012	33	41%	7	9%	-- ⁵	-- ⁵	11	14%	-- ⁵	-- ⁵	10	13%	15	19%	80
2013	25	35%	7	10%	-- ⁵	-- ⁵	13	18%	-- ⁵	-- ⁵	10	14%	14	19%	72

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁴ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁵ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

MSM = Male-to-Male Sex; IDU = Injection Drug Use; MSM/IDU = Male-to-Male Sex and Injection Drug Use; HTSX = Heterosexual Sex; Pres. HTSX = Presumed Heterosexual Sex

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/15

Table 11. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by year of diagnosis: Essex County, Massachusetts¹, 2004–2013²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Year:	N	N	%
2004	43	79	54%
2005	24	85	28%
2006	23	65	35%
2007	23	58	40%
2008	21	67	31%
2009	22	58	38%
2010	25	65	38%
2011	26	59	44%
2012	27	80	34%
2013	23	72	32%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.
Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/15

Table 12. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by gender, race/ethnicity, and place of birth: Essex County, Massachusetts,¹ 2011–2013²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Gender:	N	N	%
Male	49	145	34%
Female	27	66	41%
Race/Ethnicity:	N	N	%
White (non-Hispanic)	22	81	27%
Black (non-Hispanic)	20	42	48%
Hispanic/Latino	33	83	40%
Asian/Pacific Islander	-- ⁵	-- ⁵	-- ⁵
Other/Undetermined ³	-- ⁵	-- ⁵	-- ⁵
Place of Birth:	N	N	%
US	32	121	26%
Puerto Rico/US Dependencies ⁴	8	18	44%
Non-US	36	72	50%
Total	76	211	36%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

³ Includes American Indian/Alaska Native, other and unspecified race/ethnicity.

⁴ Ninety-nine percent of people diagnosed with HIV infection from 2011–2013 who were born in a US dependency were born in Puerto Rico, <1% were born in the US Virgin Islands.

⁵ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/15